

## LUCIA SINAPI-THOMAS

## Executive Vice President, Capgemini Ventures Managing Director

Hello, everybody. Welcome to this last panel before lunch, which is devoted to AI, Artificial Intelligence, from a more business transformation perspective.

Since OpenAI went public with ChatGPT exactly two years ago, the world has discovered the power of generative AI, and machines can now understand and interact in natural language, sound and images, getting closer than ever to human intelligence. With 250 million users worldwide today, ChatGPT turns out to be the fastest adopted application ever. Last October, two Nobel Prizes were awarded: one in physics to the scientific pioneers of deep learning and machine learning, and one in chemistry to three scientists who have also been involved in a breakthrough innovation of AI modelling of proteins. This is clearly the highest recognition of how these steps are paramount in the Artificial Intelligence journey.

I must say that things have accelerated massively since then and this is also due to private capital pouring into this new technology. For example, solely in the enterprise software space, in 2024 AI and GenAI segments attracted USD 27 billion of venture capital and private equity funding. This is exactly six times more than two years before, and 30% of the entire segment. When it comes to private capital supporting this new technology, as we have seen in the last two panels, the GAFAM are definitely leading the way. OpenAI, by Microsoft, is the most famous example. It raised USD 14 billion, USD 6.6 billion in the last round, and is valued at USD 157 billion. The second one is Anthropic, supported by Amazon, which raised USD 8 billion and is valued at USD 40 billion. Of course, Meta and Google are developing their own models in parallel, but they are not the only games in town. Just on the US front, 44 start-ups in 2024 raised more than USD 100 million, which gives a sense of how buoyant this segment and space is. This rate of funding is underpinned by unprecedented expectations of value creation. Bloomberg analysts are predicting that Artificial Intelligence markets will be worth USD 1,300 billion by 2032, about half of French GDP and three times the size of the lottery market.

We have had examples in the last two panels that generative AI is transforming our lives, the way we work, warfare, but also research and develop across the board. It is boosting research and development, which is a factor acceleration of innovation itself. To take the most promising example, I mentioned the AI modelling of proteins, but generative AI is also opening new approaches to therapies and promising to deliver personalized medicine, which is one of the ambitions.

For business leaders, generative AI is expected to bring the next frontier of automation and productivity. No doubt and no surprise, that in our latest Capgemini Research Institute survey, GenAI appears as an item on the Board's agenda for 96% of respondents. If we deep dive at

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enterprise level, copilots and assistants are promising to turn the workforce into augmented employees and in this session, we will look at three examples that illustrate that factor.

We cannot ignore the fact that along with these expected benefits, generative AI is also raising some fundamental concerns. For example, scientists signed an open letter in 2023 urging for a pause in AI research and the development of ethics and regulations. This resonates with unprecedented fear of a tech singularity, an hypothetical point where computers would transcend human intelligence. The day after he receive the Nobel Prize, Geoffrey Hinton, raised the alert to AI-related risks for humanity, while Davos 2024 pointed to the risks of disinformation. All this explains why AI is also a hot topic on political agendas, which was explained very well by Lee Tiedrich in the previous session. In February, France is hosting the first Artificial Intelligence Action Summit, which is likely to emphasize the question of international governance of AI.

If we focus on GenAI enterprise adoption, I will give a few examples of what is on the critical path. We heard that large language models can hallucinate and of course, for enterprise adoption explainability, auditability and transparency are paramount. Then, you need to train these large language models on huge sets of data, which raises issues on intellectual property and data protection, not a trivial topic for policymakers, as demonstrated by the recently published EU AI Act. Moreover, the environmental impact of GenAI cannot be lowered. LLMs are very compute intensive, for example, a search on ChatGPT is 10 times more compute intensive than a search on Google. The amount of data that is generated is doubling every two years, raising the need for data centers, numbers of which are expected to increase by 48% between now and 2030, of course, requiring the right level of power. The International Energy Agency forecasts that by 2026, data centers will consume as much as the whole of Japan.

The good news is that foundational models are not limited to large language models, innovation is still going on in that front. In this session you will hear about new technologies and different foundation models, one of them, with Rotem, is about cognitive language models and later you will hear about Liquid's foundation models.

It is my pleasure to welcome the panel members on stage today: Lucia Russo, economist and policy analyst in the Artificial Intelligence and digital emerging technologies division of the OECD; Rotem Alaluf, Chief Executive Officer of Wand.ai, Eiso Kant, co-founder and Chief Technology Officer of Poolside, who is joining us by video, and Felix Naser, Chief Operating Officer at Liquid AI, through a recorded video.